

Example:

# Creating built in attr\_accessor method

*In this task, we will create own method that behaves just like “attr\_accessor” method from the Standard Library. Also, this will help you to demystify all the magic behind Rails’ “validates”, “belongs\_to”, “find\_by\_\*” and similar methods.*

# Task:

Create your own method that behave just like built-in “attr\_accessor” method from Standard Ruby Library.

Name your helper method as “attr\_accessible”:

```
attr_accessible :foo, :bar
```

This helper method should be accessible within all classes.

# Background

```
class MyClass  
  attr_accessor :foo, :bar  
end
```

```
obj = MyClass.new  
obj.foo = "value of foo"  
obj.foo  
obj.bar
```

```
obj.instance_variables
```

```
MyClass.instance_methods(false)
```

```
# "value of foo"  
# nil
```

```
# [:@foo]
```

```
# [:foo, :foo=, :bar, :bar=]
```

# Define method in Kernel module

```
module Kernel
  def attr_accessible(*args)
    args.each do |name|
      define_method(name) { instance_variable_get("@#{name}") }
      define_method("#{name}=") { |new_value| instance_variable_set("@#{name}", new_value) }
    end
  end

  private :attr_accessible
end
```

# This prevents: `MyClass.attr\_accessible :foo`

```
class MyClass
  attr_accessible :foo, :bar
end
```

```
MyClass.instance_methods(false)
```

# [:foo, :foo=, :bar, :bar=]

```
obj = MyClass.new
obj.foo = "value of foo"
obj.foo
obj.bar = "value of bar"
obj.bar
```

# "value of foo"

# "value of bar"

# This should demystify Rails':

- attr\_accessible
- find\_by\_\*
- belongs\_to
- etc.

# Task:

Put this technique into practice by:

1. Implementing other Rails methods. Such as:
  - `validates`
  - `belongs_to`
  - etc.
2. Real life case from your own projects.

# Limiting access to your helper methods

```
class Parent
  private
  def self.attribute_reader(*args)
    args.each do |name|
      define_method(name) { instance_variable_get("@#{name}") }
    end
  end
end
```

```
class Child < Parent
  attribute_reader :foo, :bar
end
```

```
class MyClass
  attribute_reader :foo
end
```

```
# NoMethodError: undefined method `attribute_reader' for MyClass
```

```
Child.instance_methods(false)
```

```
# [:foo, :bar]
```